

The Kelly Mine

Archeological Monitoring and Hollywood Magic

Along a lonely stretch of highway in southeastern California, a massive metal headframe and huge tailing piles loom out of the desert landscape. The mining and milling remains of the California Silver Rand Company's Kelly Mine tell the story of the boom and bust of one of the richest, most concentrated silver deposits in the Randsburg District of San Bernardino County, California.

On April 12, 1919, Hamp Williams and John Nosser discovered silver in a rock outcropping 1.5 miles southeast of Randsburg. The discovery launched the extraction of an unusually high-grade ore concentration by the California Rand Silver Company, formed by John Kelly, a Bakersfield sheriff. The silver ore was so rich that the Kelly Mine was known as "the mine with no dump." The operation grew to include two main shafts. The No. 1 shaft bottomed out at 660 feet and the No. 2 shaft was cut to serve as the main exit for ore and a direct feed into the primary crusher of the mill. A massive, 200-foot high gallows head frame and hoist were purchased from the dismantlers of the Goldfield Consolidated Mining Company in Goldfield, Nevada. A 100-ton capacity oil-flotation process mill was constructed in December 1921 and quickly expanded to a 400-ton operation. The mine boasted a steady return, employed 300 people, and developed a modest industrial complex of ancillary buildings and company housing. By 1926, the blocked out ores had lower values and

the price of silver continued to drop. In 1929, the California Rand Silver Mine dissolved the company and the property was subsequently picked up on options or leases. Lessees continued to operate the mine and mill; in 1933, a lessee erected a 200-ton cyanide unit to process the lower grade ores. The plant closed in 1942 under order of the War Production Board. The mine remained dormant until an investor trucked in equipment and machinery from other mining complexes to promote speculative development plans in the 1960s. The plans never materialized; gradually, the mining and milling structures have collapsed or have been salvaged by local residents.

Nothing at the site today reveals its transformation in 1996 into the bustle of a Hollywood-constructed movie set. The three-month invasion of a cast and crew in excess of 200 people sparked another short boom for the area and an unusual historic preservation scenario.

The tailings and waste piles from the Kelly Mine offered the solution to a filming production problem. The movie storyline required a junk yard with towering piles of trash. The film's location scout was unable to find a suitable junk yard, whose owners were willing to suspend operations long enough to allow months of set construction and filming. The director and producers were steadfast in wanting to create the set designer's conceptualization of the script; they refused to use computer enhancements. During the location search, the set designer drove past the old mine and visualized the "mounds" (waste dumps) covered with junk and a town built among the weathered, partially dismantled mill buildings.

Since the Kelly Mine was located on public lands, the proposed site transformation required a special use permit from the Bureau of Land Management, Ridgecrest District. Mineral claims for the mine were owned by a private out-of-state company, which employed an on-site caretaker. The caretaker had been living at the mine for almost 30 years. Some of the Kelly Mine's company housing, located about one-quarter mile north of the waste dumps and outside of the proposed filming area, were also occupied. The juxtaposition of historic remains, local residents, and BLM regulations suggested a potential for conflicts

Blacksmith-machine shop and wooden trestle ruins associated with the Kelly Mine and a local resident's mobile home.





Hollywood transformation of the blacksmith-machine shop and wooden trestle ruins associated with the Kelly Mine and a local resident's mobile home.

as well as an unique cultural resources management situation.

The Film Project

Negotiations between the film producers and BLM began with defining the area of potential effect. The director, production designer, and director of photography (with an entourage of assistants) represented the film company. Since the Kelly Mine area had never been surveyed, the film production company contracted with Archaeological Research Services, Inc. (ARS), Virginia City, Nevada, to conduct an inventory of a 20 acre parcel encompassing the mining and milling complex constructed during the 1920s. The complex included standing structures (the original mill, power station, timber framing house, machine and blacksmith shop, miners' changing house, assay office, mine office, hoist house, and company employee housing); collapsed structures; various mining and milling features (tanks, collapsed ore bin, settling pond, industrial scatters, tank platforms, head frames, ore chute, equipment, tailings and waste piles, shafts, adits, and prospect pits); linear features (fence line, power line, and historic road); and modern features (occupied mobile homes, recent industrial scatter, junked cars and trucks, and domestic trash). Based upon ARS' research, the site was recommended as being eligible for the National Register of Historic Places.

ARS developed a management plan to protect and preserve the surviving physical and archeological remnants of the historic mine complex. With the proposed movie set construction and filming activities woven so intimately among all the historic properties, ARS and BLM required a full time monitor be either "on call" or actually present at the site during all phases of production: construction, filming, and "wrap" (clean-up). BLM also attached pertinent mitigative measures and stipu-

lations to its permit concerning threatened wildlife and endangered species, specifically the desert tortoise. BLM realty specialists, wildlife biologists, environmental coordinators, and rangers would visit the site, preside at orientation meetings, and be on hand to clarify monitoring issues. Since each phase of film production entailed different movie personnel, orientation meetings for the various crews were scheduled prior to each phase. Orientation by resource monitors included a history of the site and the rationale for protecting it, monitoring methods, violation consequences, and question and answer sessions. The monitors preapproved all set placements, vehicle and equipment locations, and activity areas. Consequences of violations included shutting down film production, fines, and employee dismissal.

The Construction Phase

Prior to movie set construction, the ARS archeologist-monitor flagged off historic features with Caution or Do Not Enter tape both to protect the cultural resources from pedestrian and vehicular traffic and for crew safety. Many of the historic standing structures were unstable. Flagging was removed if it might be visible in any scene and was replaced after filming. Whenever necessary, the monitor removed isolated historic debris from the immediate area, marked its provenience, and returned it after the "wrap" phase.

The construction crew included personnel from three departments: Construction, Art, and Set Dressing. The Construction Department fabricated 13 structures to create the fictitious community in which the movie takes place. The crew used new and recycled lumber, corrugated tin roofing, tar paper, cardboard, canvas tenting, linoleum, entire old shacks (trucked in), vehicles, and trailers to fabricate the town. All imported materials were purchased locally and looked the same as, or were made to resemble, historic structures and debris at the site. Interestingly, some materials may have originally been scavenged, dismantled, and removed from the site in earlier times. Mobile homes occupied or owned by current site residents were cosmetically sheathed to match the fabricated movie structures. With the exception of several temporarily installed power poles, ground disturbance was limited to previously altered areas.

The Art Department supervised and managed the set through all filming phases. The production designer viewed the site as a blank canvas, which he continually manipulated in order to achieve his design concept. As an artist, he had difficulty attaining 100% of his creative goal within the parameters of cultural resource protection. Since he envisioned the tailings covered with junk, a fundamental challenge was to derive a way to simulate

towering refuse piles without damaging the integrity of the mine-related tailings.

The Set Dressing Department added the decorative details to the movie set—furniture, fixtures, and various appointments. They were charged with covering the tailings, decorating the exteriors and interiors of structures, and adding all the finishing touches. They wired scrap metal, household appliances, industrial equipment, and myriad other junk items to lengths of chain link fencing at the top of the tailings. After securing one end of the fencing to the top of the pile with 18-inch steel stakes, the fencing was lowered over the side in vertical rows. Automobile hoods placed beneath the fencing at the top rim of the dumps protected the waste piles and allowed the decorated, heavy fencing to slide more easily over the edge. Crew members descended the pile and guided the fencing. The “junk piles” covered a 525 feet long by 70 feet high area. Car chassis, household appliances, and large hunks of sheet metal were stacked on top of the dumps to further extend the height of the pile. Cardboard, rusted cans, and plastic bottles were tied to camouflage nylon netting then rolled into “burritos” and unrolled over two smaller waste piles. A fence contractor installed a 420 foot long chain link fence topped with razor wire near the base of the tailing piles in previously disturbed areas. Set dressers stretched black painted cotton clothesline between historic and temporarily installed power poles to simulate electrical wiring.

Vehicle and foot traffic were confined to pre-existing roads. The historic public road through the site has seen continuous use, but during film production access was limited. Personal crew vehicles and tracked vehicles were prohibited on site. Construction materials were off-loaded and staged in the previously disturbed settling ponds or along the road. A water truck sprayed the road for dust control. All potential ground disturbances were monitored.

Sawdust from on-site construction was captured on ground cloths and all trash, including cigarette butts, deposited in appropriate containers. “Craft Services” provided lunch (make your own sandwiches), snacks, and beverages on site; they also were responsible for cleaning up any trash.

Construction activities proceeded in a fairly orderly fashion and were easily monitored from the top of the tailings pile or at the individual building locations. Since the production designer continually re-created the visual

layout of the set, he often had to be reminded about ground disturbance restrictions. The construction phase blended the movie set so well with the historic fabric that new personnel involved in the succeeding phases of the project could not distinguish between the two. Local residents, who lived on the site or in the general area, liked the transformation and the new neighborhood. This seamless mix of structures and the attitude of local community members created problems for the monitor during the filming and subsequent wrap phase.

The Filming Phase

Filming meant the invasion of the site by electrical, lighting, sound, and camera personnel along with tons of equipment. BLM and the archeologist-monitor effectively closed all roads into the site. Access to the site was either by foot or via shuttles that ran from off site to a designated drop-off spot.

The tradition of the movie industry is to get things down quickly and efficiently; “time is money” was more than a motto on the movie set. In their haste, movie personnel often had to be reminded of site restrictions; staff often forgot that not all of the structures were a movie fabrication. Since the movie set blended so well with the historic structures, the archeologist-monitor continually had to point out the restricted areas to the crew.

Prior to the film company’s interest, local residents had free access to the site; consequently, they did not appreciate the access restrictions imposed by BLM and the film company. The presence of crew members or local residents in restricted, unsafe areas, and on-site in general, became a liability and compliance problem. The profusion of activities, the numerous pieces of portable equipment, and the huge menagerie of

Post-filming appearance of the blacksmith-machine shop and wooden trestle ruins associated with the Kelly Mine and a local resident’s mobile home.





Designed and fabricated "historic residence" for filming of The Brave.

people made the filming phase the hardest to monitor.

The Wrap Phase

BLM's approval mandated that all imported sets, equipment, trash, refuse, debris, and waste be removed from public land. Since the construction and set dressing crews had seen the site prior to set construction, they were charged with clean-up. Materials were sorted and organized, then returned, sold, or hauled to dumpsters for disposal at landfills. The film's climactic demolition scene, in which heavy equipment destroys the town, and the eventual dismantling of the waste pile coverings created splintered and fragmented heaps. Consequently, the entire historic landscape required hand raking.

Construction had required auguring post holes, leveling portions of two disturbed areas for building new "houses," temporary removal of isolated historic artifacts, and cleanup of modern trash present at the site prior to filming activities. The greatly increased pedestrian and vehicular traffic obviously affected annual undergrowth and added to wear on the road. As part of the cleanup phase, the movie crew removed significant amounts of the modern residents' trash, including an abandoned mobile home.

BLM assessed no damages for failures to comply with any term or condition of the permit.

In-depth consultation with the BLM, the cooperation of all film personnel, and the presence

of a full-time archeologist-monitor ensured the implementation of mitigative stipulations and strict compliance. Consequently, film production activities had minimal effect on the historic landscape of the Kelly Mine site.

Final Observations

During the beginning of the filming phase, the special effects coordinator remarked to the monitor that the film industry believes it has the right to do whatever it wants - invasion of house and home included. Film making, he astutely observed, is not a cure for cancer. The grip crew further warned the monitor about the Hollywood mentality; they advised to "Just Say NO" without hesitation and, if necessary, to actually stop production until conditions or personnel were in compliance.

Yes, there were headaches as an "archaeo-cop." The Mojave Desert in July and August is 120 degrees and night shoots last until sunrise. Yet, watching the "magic" of transforming the historic site into a movie set was incredible. The behind-the-camera experience has added a new understanding to all the facets of film making. The crews and cast were gregarious, interesting, and fun. The catering menu ranged from barbecued salmon to omelets to a smorgasbord of desserts; the mocha lattes at 2:00 a.m. kept the monitor awake through the numerous night retakes. Viewing the "dailies" (film from the previous day) added a different perspective on the reasons for the repeated shooting of each scene.

The site has been returned back to "normal." A visit to the Kelly Mine area does not reveal the frantic film making activities; however, a chat with people at the local store will unleash a host of stories. Unfortunately, *The Brave* was a major disappointment at the Cannes Film Festival; therefore, the movie most likely will not be released in the United States. This Hollywood "magic" is stored in boxes at a warehouse somewhere in Los Angeles, California.

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